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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/571,747

03/14/2006

Eric L. Meijer

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
595 MINER ROAD
CLEVELAND, OH 44143

EXAMINER

LARYEA, LAWRENCE N

ART UNIT	PAPER NUMBER
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3768

MAIL DATE	DELIVERY MODE
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08/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/571,747

Applicant(s)

MEIJER, ERIC L.

Examiner

Lawrence N. Laryea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/14/2006</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 5, line 4 recites the limitation "other diagnostic images". It is unclear which other diagnostic images this limitation is intended to refer to.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Sabol et al (Pub. 2004/0122702)** in view of **Brackett et al (Pub. 2003/0206646)**.
5. Re Claims 1,3,7-11,12,13,14 and 18: **Sabol et al** teach diagnostic image processing system comprising: a parameter extraction processor (**14**) for extracting selected parameter values from a diagnostic image representation or from data for generating the diagnostic image images a subject database that stores the image representation and the extracted parameter values in association with at least a patient identity (**See Paragraph [0267]**) and (**See Paragraphs [0050], lines 31-38, [0053],**

lines 5-27, [0057],[0060],[0062],[0114],[0348],[0365], [0110] [0297] and [0406]); the database is capable of updating each time the subject is imaged date (See Paragraphs [0283],[0317] and [0333]; and, a report formatting means capable of formatting the extracted parameter values from a plurality of diagnostic images generated at different times into a report (See Paragraph [0055]).

6. Re Claim 2: **Sabol et al** teach diagnostic image processing system including: a user interface with which a user selects a region of interest of at least a baseline one of the diagnostic images from which the parameter values are to be extracted (See Paragraph [0251]) and also Figures 1-31

7. Re Claim 4: **Sabol et al** teach diagnostic image processing system including: an image registration processor that aligns and scales the diagnostic images (See Paragraphs [0294]- [0297] and [0442]).

8. Re Claim 5: **Sabol et al** teach diagnostic image processing system including: a database searching means for searching the subject database for other diagnostic images of the selected region of interest of the subject, the parameter extraction processor extracting the selected parameter values from the other diagnostic images of the selected region (See Paragraphs [0329], [0368], [0369], [0372], [0314], [0056], [0063], [0311] and [0442]).

9. Re Claims 6,15,16 and 19: **Sabol et al** teach diagnostic image processing system wherein the report formatting means includes a graphing means for plotting change of a selected parameter versus time (See Paragraphs [0323], [0288] and [0325]).

10. Re Claim 17: **Sabol et al** teach diagnostic image processing system wherein the parameter values include at least one of: a volume of the selected region; a blood flow through the selected region; an average density in the selected region; diffusion coefficients of the selected region; fractional diffusion anisotropy values in the selected region; and, spectroscopic peak intensities in the selected region.

11. Re Claim 20. **Sabol et al** teach diagnostic image processing system wherein the image representation and the at least one other image representation are produced by different modalities of diagnostic imaging and registered by aligning structures identifiable in all modalities involved, and further including: enhancing the resolution of the image representations by utilizing complementary characteristics of the modalities involved (**See Paragraphs [0134], [0136], [0137], [0156], [0231], [0340], [0397], [0426], [0431] also Figures 1-31**)

12. **Sabol et al** disclose the claimed invention, see supra; however **Sabol et al** does not expressly disclose the diagnostic image processing system wherein the subject database stores the acquired data in association with at least a date and wherein the cine image sequence generating means for converting the selected region of interest of the diagnostic images into a temporally scaled sequence of cine images.

13. **Brackett et al** disclose a diagnostic image processing system wherein the subject database stores the acquired data in association with at least a date and wherein the cine image sequence generating means for converting the selected region of interest of the diagnostic images into a temporally scaled sequence of cine images (**See Paragraphs [0009], [0031], [0003], [0008], [0007], [0034], [0046] and [0053]**).

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It would have been obvious to one having ordinary skill in the art at the time invention was made to modify a diagnostic image processing system similar to that of **Sabol et al** to incorporate similarly teachings of **Brackett et al** in order to fast retrieve and identity diagnostic image and for future medical examination purposes.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence N. Laryea whose telephone number is 571-272-9060. The examiner can normally be reached on 9:30 a.m.-5:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on 571-272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LNL



Eleni, Mantis-Mercader
Supervisory Patent Examiner
Art Unit 3768